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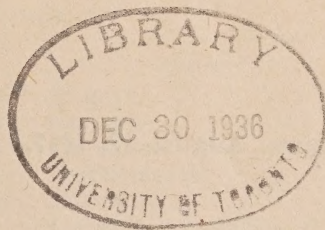
Canada Food Board



WAR MEALS

PRACTICAL SUGGESTIONS TO SAVE BEEF, BACON,
WHEAT AND FLOUR TO MEET THE
WAR-NEEDS OVERSEAS.

ISSUED BY THE FOOD CONTROLLER FOR CANADA.



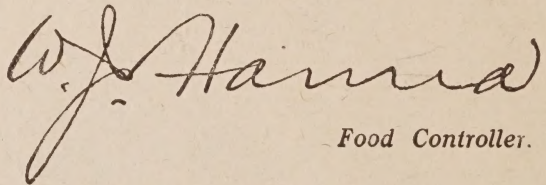
OTTAWA
J. DE LABROQUERIE TACHÉ
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1917

TO CANADIANS.

The armies and civilian populations of the allied nations overseas need all the wheat, flour, beef and bacon that Canada can supply. Three things we can and must do while this overseas war-need continues. WE MUST PRODUCE ALL WE CAN, WASTE NOTHING, AND SHIFT OUR CONSUMPTION, as much as practicable, FROM WHEAT, FLOUR, BEEF AND BACON TO OTHER FOODS. The other foods are just as wholesome for us but are not as suitable for shipment overseas in war time.

Every man and woman in Canada should do their share of this necessary war service. It does not call for sacrifice. It does require earnest, intelligent, diligent thinking and action, sustained by the conviction that it is necessary, that it will help to win the war, and that it will do us good individually and nationally.

I seek and urge the co-operation of every citizen. Do your bit to save every bit of food.

A handwritten signature in dark ink, reading "W. J. Hanna". The signature is fluid and cursive, with the first name "W. J." written in a more compact, stylized manner than the last name "Hanna".

Food Controller.

Ottawa, August 17, 1917.

INFORMATION ABOUT FOODS.

CERTAIN MATERIALS IN FOOD SERVE to form the blood, tissues and bones of the body, and repair the wastage from its constant wear; certain materials furnish energy for doing work and for keeping up the many activities of the body; they also produce heat to keep it warm. Certain of the materials aid in digestion and assimilation and help to keep the different organs in good condition. Many kinds of foods contain all these materials. Some kinds are particularly serviceable as "body-builders," others for supplying energy and heat, and others for aiding digestion and keeping the body in good health.

The following tables indicate the class, in general, to which different foods belong, although nearly all foods serve the three purposes mentioned, viz.: (1) to furnish material for the building and repair of the body, (2) to produce energy and heat, and (3) to aid digestion and assimilation.

FOODS WHICH FURNISH MATERIAL TO BUILD THE BODY AND KEEP IT IN REPAIR.

Use in each meal at least one of them.

Lean Meat, Poultry or Fish—in any form.

Eggs—in any form.

Milk—whole, sweet, sour, skim or buttermilk. Skim milk is even more valuable for body-building than whole milk.

Cheese—in any form.

Cereals—flours and meals from oats, wheat, corn, rye and barley, in breads and breakfast foods.

Legumes—dried beans and peas.

Nuts.

FOODS WHICH YIELD ENERGY FOR WORK AND WARMTH FOR THE BODY.

CARBOHYDRATES.

FATS.	STARCH.	SUGAR.
Poultry and fish, Meat fats, Butter, Cream, Lard, Oils, Most nuts, Chocolate, Cheese from whole milk.	Cereals and their pro- ducts, such as flour, bread, oatmeal, bar- ley, rye flour, buck- wheat flour, pease meal, etc., Dried beans and peas, Potatoes, Macaroni, Chestnuts, Peanuts, Cocoa.	Sugars, Syrups, Candies, Dried fruits, Bananas, Certain vegetables.

FOOD CONSTITUENTS WHICH AID DIGESTION, KEEP THE BLOOD IN GOOD CONDITION, AND REGULATE THE SYSTEM.

Mineral Substances—lime salts, compounds of phosphorus, iron, etc.
Plentiful in drinking water, fruits, vegetables, milk, eggs, cereals, etc.

Acids—in all fruits.

Water—in beverages, soups, fruits, etc.

Cellulose—the framework of vegetable foodstuffs which provides bulk and tends to prevent constipation. Plentiful in fruits, vegetables, cereals.

Newly Discovered Substances known as Vitamines—believed to play a very important part in keeping people well and promoting the growth of children. Found in milk, eggs, fruits, vegetables, cereals, etc.

PLANNING OF MEALS.

Authorities tell us that the body's requirements of food must be met by a sufficient quantity daily; that the daily quantity must furnish body building, energy yielding and regulating substances in due proportion; and that the age, weight and activity of the body have an influence on both quantity and proportion needed.

The following suggestions have been tabulated to help those who have not made a careful study of food values, but who wish to provide adequate nourishment **and to meet the present war-need for the conservation of wheat, beef and bacon.** They show quite clearly that many other foods can be used as partial or complete substitutes. Careful planning and preparation of meals will enable a housekeeper to make her food purchases go as far as possible; and her ingenuity will devise **many ways of saving wheat, flour, beef and bacon,** while providing wholesome nourishment for the household. Local products should be used whenever practicable. That saves cost and labour of transport, and encourages further local production.

BREAKFAST SUGGESTIONS.

Remember the war-need for saving wheat and flour. Choose not more than one from each Group.

FRUITS.	CEREALS.	BREADSTUFFS.
Fresh— Apples, Berries, Melon, Any seasonable fruit.	Oatmeal, rolled oats, cornmeal mush, hominy, rye por- ridge, barley porridge. Combination of two or more of the above. Various prepared cereals.	Bread or rolls, Toast, Cornbread, Muffins, scones, etc. Oatcakes, Boston brown bread, Pancakes,
Dried— Cooked— Apples, Stewed fresh fruits, Dried fruits, Bananas.	MEAT SUBSTITUTES. Fish in any form, Eggs in any form, Baked beans, Peas-brose, Milk.	BEVERAGES. Coffee, Tea, Cereal coffee, Cocoa, Milk, Water.

LUNCH AND SUPPER SUGGESTIONS.

Remember the war-need for saving wheat and flour. Choose not more than one from each Group.

MEAT SUBSTITUTES.

Milk,
Milk soups,
Bean or pea soup,
Chowders,
Baked beans,
Substantial salads,
Eggs in any form,
Cheese dishes,
Fish in any form.

BREADSTUFFS.

Bread,
Rolls, coffee, cake, etc.,
Muffins, gems, etc.,
Biscuits, scones, etc.,
Oatcakes,
Soda biscuits, etc.,
Boston brown bread,
Waffles, pancakes, etc.

SWEETS.

Fruit in any form,
Honey, syrup, etc.,
Cake, cookies, etc.,

BEVERAGES.

Tea, coffee, cocoa.
Milk, buttermilk,
Fruit drinks.

DINNER SUGGESTIONS.

Remember the war-need for saving beef and bacon. Choose not more than one from each Group.

MEATS AND MEAT SUBSTITUTES.

Meats.

Flesh of animals—any form.
Poultry—any form.

Fish.

Served in any form.

Meat Substitutes.

Eggs—any form.
Cheese and cheese dishes.
Dried beans and peas—any form.
Milk soups.

VEGETABLES OR CEREAL (FOR FUEL VALUE).

Potatoes. Rice.
Parsnips. Hominy.

SECOND VEGETABLE (FOR REGULATING VALUE).

Roots, Bulbs, Tubers.

Onions. Beets.
Turnips. Carrots.
Artichokes.

Green Vegetables.

Cabbage. Green peas and
Cauliflower. beans.
Asparagus. Celery.
Spinach. All salad stuffs.

Tomatoes, Squash, etc.

SWEETS OR DESSERTS.

Light.

Fruits—fresh, baked, stewed.
Fruits in jellies or ices.
Fruits in jams, preserves, etc.
Junket.

Medium.

Custards.
Milk and cereal puddings.
Fruit pies.
Cake and cookies (plain).
Ice cream—plain.

Heavy or Rich.

Rich puddings, e.g., plum, suet,
and most steamed puddings.
Rich pies—mince, cream chocolate
and custard.
Rich cakes—fruit, pound, and all
with much fruit, fat or nuts.

WELL-BALANCED MEALS.

A well-balanced dietary supplies body-building, heat-and-energy-supplying and regulating substances in the right proportion and in sufficient quantity. Simple meals can fulfil all requirements. It is wiser to spread the variety of food over many days than to provide many kinds of food in each meal every day.

Following are examples of simple but well-balanced meals:—

1. Fruit, oatmeal and whole milk.
2. Egg, bread, butter, fruit or vegetable.
3. Bread, cheese, tart fruit.
4. Baked beans, brown bread, apple sauce.
5. Mutton, potatoes, second vegetable, fruit batter pudding.
6. Milk soup, corn bread and syrup.
7. Whole wheat bread, whole milk, prunes.

These are not ideal for all ages and conditions, but they meet the needs of healthy active adults.

EXAMPLES OF A DAY'S MEALS.

I. FOR A HARD-WORKING MAN.	II. FOR A MAN AT SEDENTARY WORK.	III. FOR A 3-YEAR-OLD CHILD.
<p style="text-align: center;"><i>Breakfast.</i></p> <p>Oatmeal. Creamed codfish. Brown bread. Butter. Milk for porridge and coffee. Sugar. Coffee (or tea).</p> <p style="text-align: center;"><i>Dinner.</i></p> <p>Pork chop. Mashed potatoes. Carrots. Bread. Steamed pudding. Milk for coffee. Sugar. Coffee</p> <p style="text-align: center;"><i>Supper.</i></p> <p>Bean soup. Corn muffins. Butter. Sliced bananas or stewed fruit. Cookies. Milk for tea. Sugar. Tea.</p>	<p style="text-align: center;"><i>Breakfast.</i></p> <p>Fresh fruit. Cornmeal mush. Scrambled egg. Rye bread. Butter. Milk for mush and coffee. Sugar. Coffee (or tea).</p> <p style="text-align: center;"><i>Dinner.</i></p> <p>Cream of tomato soup. Bread or biscuit. Mutton. Boiled potato. String beans. Baked apple. Thin cream. Sugar.</p> <p style="text-align: center;"><i>Supper.</i></p> <p>Creamed fish on toast. Milk biscuits. Apple sauce. Milk for tea. Sugar. Tea.</p>	<p style="text-align: center;"><i>Breakfast.</i></p> <p>Scraped fresh apple or orange juice Strained oatmeal and top milk. Milk to drink.</p> <p style="text-align: center;"><i>Morning Lunch.</i></p> <p>Milk. Biscuit.</p> <p style="text-align: center;"><i>Dinner.</i></p> <p>Poached egg. Tender vegetable put through sieve. Stale bread and butter. Corn starch pudding. Milk to drink.</p> <p style="text-align: center;"><i>Supper.</i></p> <p>Rice and top milk. Seedless jam sandwiches. Milk to drink.</p>

The average woman requires about four-fifths as much as the average man, and children less in proportion; but an active youth needs as much as a man, and a hard-working woman more than a man at light work.

A WEEK'S FOOD SUPPLY FOR A FAMILY.

The following list of supplies has been determined by calculations based on standards set by recognized authorities* for a family of five:—

- Man working moderately hard, weighing about 150 pounds.
- His wife, doing all the household work, weighing about 125 pounds.
- A boy of twelve, weighing about 75 pounds.
- A girl of nine, weighing about 56 pounds.
- A child of three, weighing about 35 pounds.

10 pounds of meat or meat substitute.	{	Moderately fat meat Poultry Fish Eggs Cheese Dried peas, beans and peanuts.
20 pounds of cereal products.	{	Flours—wheat, rye, corn, barley, oat. Meals—Breakfast foods, oatmeal, corn meal, flaked barley, etc. Soda biscuit, etc.

If bread is purchased, deduct 1 pound of flour for every 1¼ pound of bread.

*Ontario Dept. of Agriculture. United States Dept. of Agriculture.
Cornell University.

- 20 pounds of potatoes..... When these are scarce, one-fifth the weight in rice, hominy, or other cereal may be substituted.
- 28 pounds of other vegetables and fruits. Dried fruit may substitute for part of the fresh at the rate of 3 or 4 ounces of dried for $1\frac{1}{4}$ pounds of fresh.
- 3 pounds of fat..... { Butter
Dripping.
Cooking fats or oils.
- 14 quarts of milk..... Skim milk or buttermilk may replace half of this, but extra fat will have to be purchased at the rate of $1\frac{1}{2}$ ounces for each quart.

The items of food in each group are not exactly the equivalents of each other; but a week's diet is likely to include enough of several of them to make a satisfactory average.

The above supply allows ample nutrition for the family, but makes no allowance for the waste of anything usable.

The quantity of cereal products may seem high to many Canadians, but they form a good foundation of wholesome and economical food; and they can be made attractive if bread, cakes and puddings are well made, and breakfast cereals are thoroughly cooked and nicely seasoned. A smaller proportion of cereal products entails a larger proportion of more costly foods.

Tea and coffee, being mere stimulants, are not included in the list. If used by the adults, they should be forbidden to the children. Milk is much more satisfactory for children.

Flavours and seasonings are not included in the list, but the thrifty house-keeper wisely uses them to provide variety and make many inexpensive foods more attractive.

GENERAL NOTES.

A—On Diet for Children:

I. INFANTS—Mother's milk in preference to anything else. When this cannot be had, clean cow's milk, properly modified, is next best for the young child.

II. LITTLE CHILDREN—Plenty of whole milk, strained cereals, bread and plain biscuits, butter or dripping; juice and pulp of mildly acid fruits, tender vegetables rubbed through a sieve; and eggs. No meat.

The family diet should furnish all these, with little special labour or preparation.

III. OLDER CHILDREN—Add by degrees fish, meat, other vegetables and fruits and most things on the adult's table, except highly seasoned foods, tea and coffee, and foods very rich or difficult of digestion.

B—On Conserving Wheat:

I. In making white-flour yeast bread dilute the flour,

(a) By adding a porportion of rye, barley, corn or oat flour, to the white flour before mixing. Any proportion up to 20 per cent makes a palatable bread.

(b) By adding cooked breakfast foods to the batter or dough.

(c) By adding potatoes. They should be boiled, mashed and returned to the cooking water, then cooled and used for mixing the bread.

II. Waste no scrap of wheaten bread:

- (a) Cut no more than will be used.
- (b) If bread cannot be used before it would mould, dry it thoroughly and store like any cereal.
- (c) Re-make left-over bread into new bread, cake or puddings.

III. Use more bread made without yeast, as for example, biscuits, scones, oat-cakes, johnny cakes, potato cakes, muffins, pancakes, etc. A variety of these may be made by combining with white flour, meals or cooked breakfast foods from the other grains. Sour milk or cream or buttermilk with soda gives to most of these a better flavour than sweet milk and baking powder.

IV. Use more breakfast foods from oats, corn, barley, and rye. Most farmers can arrange to obtain a supply locally. When fresh ground, the flavour is superior to most commercial meals.

V. Baking Notes.—The wise housekeeper will use her own favourite recipes, and gradually modify them to suit the taste and needs of her family.

- (a) **YEAST BREAD.**—Rye flour may replace white flour up to three-quarters and the bread made in the ordinary way. Corn, barley and oat flour do not yield gluten; they will not become spongy, but may replace wheat flour up to one-fifth and still yield a light bread.
- (b) Cornmeal, oatmeal and barley meal may replace white flour in two ways.

The meal—one-fifth to one-third by measure—may be scalded with some of the bread liquid, and allowed to cool before the bread is mixed and made as usual.

The meal may be made into porridge or mush and when cooled added to the other bread ingredients. Left-over breakfast porridge may be used in this way.

- (c) **BAKING POWDER AND SODA MIXTURES.**—Many combinations of the flours, meals and stale bread may be made with white flour, or without, along the same lines as suggested for yeast breads.

They may be served hot or cold in the form of baked or steamed loaves or cakes, biscuit, cookies, scones, gems, muffins, dodgers, puddings or pancakes.

Sour milk, buttermilk or sour cream with soda gives superior flavour to all these mixtures, but care must be taken to avoid using too much soda. Three-eighths level teaspoon to 1 cup is ample. If the milk is but slightly sour sweeten with a pinch of soda to the cupful and use with baking powder as usual.

- (d) **PASTRY.**—While flour is necessary for puff or flaky pastry, plain short pastry can be made from any combination of flour that will make bread.

VI. Use more potatoes and other vegetables. The family with a well stocked garden is in a position to do this cheaply. When potatoes are scarce use more rice and hominy in their place.

C—On Converting Beef:

- I. Use other meats instead of beef as far as practicable.**
- II. Use meat but once a day. Use meat substitutes at other meals.**
- III. In ordering beef, do not always demand the same cut. Plan to use other cuts, and do your share towards getting the whole carcass used.** The members of Beef Rings have to do this and do not suffer.

A Beef Ring is a group of country people who agree to provide among themselves one beef animal of specified age and weight each week. The carcass is divided among the group according to fixed rules, so that in the course of the year each member gets in rotation an equal share of the different cuts.

D—On Conserving Bacon:

- I. It can be banished without the family suffering. Its present cost has already made it disappear from many tables.
- II. Ham and salt pork will partly take its place for fat and flavour.
- III. Waste no ham or salt pork. Preserve even the rind and bones for the flavour they will give to many dishes.

E—Consumer's Share in Conservation:

The consumer should remember that thorough mastication of food is a measure of conservation as well as of health. The man who chews his food properly nourishes his body and satisfies his palate with smaller quantities than the man who bolts his meals.

CALCULATION OF FOOD VALUES.

The following table of representative foodstuffs is included for those who may wish to make comparison of one food with another, or to calculate the value or balance of their usual diet.

The table omits the water and mineral content of the foodstuffs, because the mixed diet of the average Canadian furnishes ample quantities.

Authorities estimate that one pound of pure protein or carbohydrate will yield 1,860 calories*, but pure fat will yield two and a quarter times that or 4,220 calories.

The number of calories which a day's food should supply depends upon many things, but chiefly upon body-weight and activity. It has been estimated† that for each pound of body-weight there is needed a total of about:—

40 calories per pound for a child of 1½, -2 years.				
31-35	"	"	"	5-7 "
35-30	"	"	"	8-12 "
23-20	"	"	"	14-17 "
18-20	"	"	man at	light work.
20-23	"	"	"	hard work.
26-38	"	"	"	severe work.
16-18	"	"	woman at	sedentary work.
18-20	"	"	"	moderately hard work.
20-24	"	"	"	heavy work.

Towards the total calories, the protein of the food should furnish 2½ to 4 calories for each pound of body-weight, the larger figure for the child who has a body to build up as well as to repair. For example a child of two years weighing 26 pounds will need food which will yield 104 calories from its protein and 1,040 calories in all, while a man at light work, weighing 150 pounds will need food yielding 375 calories from its protein and 3,000 calories in all.

*This calorie is a unit of heat or energy measurement. In terms of heat it is nearly the amount required to raise 4 pounds water 1° Fahr. In terms of energy it is the amount required to raise 1 pound 1 foot.

†See "Feeding the Family"—Mary S. Rose.

REPRESENTATIVE FOODSTUFFS (AS PURCHASED).

FOODSTUFFS.	Percentage of Chief Nutrients.			One pound contains	
	Protein.	Fat.	Carbo- hydrate.	Calories from protein.	Total calories.
<i>Meat—</i>					
Lean beef.....	19.5	7.3	.....	362	670
Side of beef.....	13.9	21.8	.....	258	1,180
Mutton.....	14.0	23.7	.....	260	1,260
Pork.....	13.6	28.0	.....	252	1,435
Veal.....	16.6	7.9	.....	308	640
Ham (cured).....	14.8	34.6	.....	275	1,735
<i>Fish—</i>					
Codfish, fresh.....	10.6	0.2	.....	197	205
Codfish, salt.....	16.0	0.4	.....	297	315
Salmon, fresh.....	14.3	8.8	.....	265	635
Salmon, canned.....	19.3	15.3	.....	358	1,005
Oysters not in shell.....	6.0	1.2	3.7	111	230
<i>Poultry Products—</i>					
Chicken, young.....	21.9	8.9	.....	407	945
Duck.....	18.3	19.0	.....	340	1,290
Eggs.....	12.1	10.2	.....	225	635
<i>Dairy Products—</i>					
Milk, whole.....	3.3	4.0	5.0	61	325
Milk, skimmed.....	3.4	0.3	5.1	63	170
Butter.....	1.0	85.0	.....	18	3,605
Cheese.....	28.3	35.5	1.8	526	2,070
<i>Nuts—</i>					
Peanuts, shelled.....	24.7	32.1	23.1	459	2,450
Walnuts.....	18.4	64.4	13.0	262	3,300
<i>Cereal Products—</i>					
Flour, white.....	11.0	1.1	74.9	204	1,645
Flour, whole wheat.....	13.9	1.9	71.9	258	1,675
Oatmeal.....	15.1	7.1	68.2	280	1,850
Cornmeal.....	9.2	3.8	70.6	171	1,645
Rice.....	7.4	0.4	79.4	137	1,630
White bread.....	8.8	1.7	56.3	163	1,280
Buckwheat flour.....	6.9	1.4	76.1	128	1,605
<i>Vegetables—</i>					
Potatoes.....	2.1	0.1	17.9	39	375
Turnips.....	1.2	0.2	8.2	22	185
Onions.....	1.4	0.3	10.1	26	225
Spinach.....	2.1	0.3	3.2	39	110
Tomatoes.....	0.8	0.4	2.5	14	80
Beans, string.....	2.2	0.4	9.4	40	235
Beans, dried.....	23.1	2.0	59.2	429	1,615
<i>Fruit—</i>					
Apples.....	0.2	0.4	15.9	3	315
Oranges.....	0.6	0.1	8.5	11	170
Bananas.....	0.8	0.4	14.3	14	300
Prunes.....	0.9	.....	18.9	16	370
<i>Sugars—</i>					
Sugar, granulated.....	.....	.....	98.0	.....	1,820
Honey.....	0.4	.....	81.2	7	1,520
Molasses.....	.....	.....	73.1	.....	1,360

HELP THE FIGHTERS TO WIN.

SAVE WHEAT.—Great Britain and our Allies must have 460,000,000 bushels from Canada and the United States. Normal consumption must be reduced by at least 25% to meet war needs.

SAVE BEEF AND BACON.—Normal consumption must be reduced by at least 25 per cent to meet war needs.

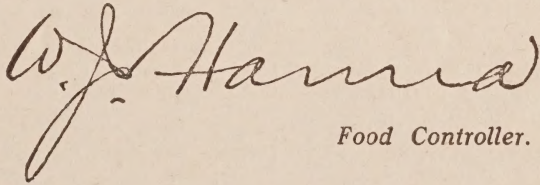
The demand for these commodities is imperative. The men in the trenches will go hungry if you fail them. Will you let them fight for you and not fight for them?

YOU CAN USE SUBSTITUTES—such as other meats, fish, eggs, milk, oatmeal, barley, etc., with benefit to health.

YOU BETRAY YOUR COUNTRY'S CAUSE WHEN YOU WASTE FOOD.—Over \$50,000,000 worth of foodstuffs goes into the garbage waggons of Canada every year. Such waste in wartime is a crime. Your loyalty is measurable by your saving.

EAT PERISHABLE PRODUCTS.—Preserve, dry, can and store the garden truck which has been produced so abundantly this year. By doing so you prevent waste and release storable foods for export.

VICTORY IS DEPENDENT UPON THE EXTENT OF YOUR FOOD SERVICE.



Food Controller.

FOOD CONTROL IN CANADA.

1. General Ends to be Accomplished:

- (A) To have available as large a quantity as possible of suitable foods for the Allied armies;
- (B) To have available as large a quantity as possible of suitable foods for the civilian populations of Great Britain and the Allies;
- (C) To have sufficient and suitable food at reasonable prices for the civilian population of Canada.

2. Means Through Which These General Ends May Be Accomplished:

- (A) Increase in the production of foods;
 - (B) Elimination of waste in the handling and use of foods;
 - (C) Shifting of the consumption, in part, from foods needed for the armies and civilian populations of Great Britain and the Allies, chiefly *wheat and flour, beef and bacon*;
 - (D) Prevention of unnecessary increase in prices of foods.
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ORGANIZATION OF ADVISORY BODIES.

(VOLUNTEER PATRIOTIC SERVICE.)

Special Committees

To investigate, formulate, and suggest plans for dealing with particular problems coming before the Food Industries, Food Distribution and Food Saving Bureaus, which deal with various phases of the food problem such as distribution, costs and prices, consumption, etc.

Personnel to include representatives of

Producers,
Manufacturers,
Handlers,
Consumers, as the cases and circumstances may require.

Advisory Council

To advise Bureaus through the Food Controller on questions of Productions, Manufacture, Transportation, Storage, Distribution, Costs and Prices, Consumption, Exportation, etc.

Personnel to include representatives of

Government Departments,
Churches,
The Press,
Educators,
Scientists,
Urban Business,
Farming,
Labor Organizations,
Provincial Committees.

Provincial Committees

To co-operate in securing means and methods for carrying out plans prepared by Bureaus and approved by Food Controller.

Personnel to include representatives of

Provincial Government Departments,
Local Governments and Boards, Churches, The Press, Educators, Urban Business, Farming,
Labor Organizations,
Women's Organizations,
Men's Organizations.